Docket No. 200309963-1

Amendments to the Claims:

Status of Claims:

Claims 1-28 are pending for examination.

Claims 1, 11, 17, 21 and 24 are in independent form.

1. (Original) A system, comprising:

a first set of power converters configured to convert an input power level to one or more output power levels;

a second set of power converters; and

an interleaved intermediate bus configured to supply independent and redundant input to the second set of power converters from the one or more output power levels of the first set of power converters.

2. (Original) The system of claim 1, where the first set of power converters include power transformers.

3. (Original) The system of claim 1, where the first set of power converters include isolated converters.

4. (Original) The system of claim 1, where the second set of power converters include non-isolated converters.

5. (Original) The system of claim 1, where interleaved intermediate bus includes outputs from the first set of power converters being operably connected to inputs of the second set of power converters forming multiple independent buses.

6. (Original) The system of claim 1, where interleaved intermediate bus is configured without fault protection components.

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7. (Original) The system of claim 1, where second set of power converters are configured in parallel, and where the second set of power converters configured to receive the redundant input.

8. (Original) The system of claim 1, where the system is embedded in a computer system and the second set of power converters are configured to output power to one or more logic devices within the computer system.

9. (Original) The system of claim 8, where the second set of power converters have outputs that are selectively combined to generate one or more selected output levels.

10. (Original) The system of claim 1, where the system is embedded in one of, computer, an image forming device, a logic device, a printed circuit board, and a circuit.

11. (Currently Amended) A computer system including a power source for providing power to one or more electronic components within the computer system, comprising:

a power source;

a first group of non-isolated converters configured to have output signals combined to generate a first power output for a first electronic component, the first group of non-isolated converters including a redundant converter;

a second group of non-isolated converters configured to have output signals combined to generate a second power output for a second electronic component, the second group of non-isolated converters including a redundant converter;

a set of isolated converters each configured to convert an input voltage from a power source into an output voltage; and

an intermediate power bus architecture configured to provide the output voltage from one or more isolated converters from the set of isolated converters as an independent input voltage to ~~each~~ one non-isolated converter within the first group of non-isolated converters, and an independent input voltage to ~~each~~ one non-isolated converter within the second group of non-isolated converters.

12. (Original) The computer system of claim 11 where the intermediate power bus architecture includes multiple independent buses configured to provide the output voltage from the set of isolated converters.

13. (Original) The computer system of claim 11 where the output voltage from each of the set of isolated converters are selectively operably connected to inputs of the first and second groups of non-isolated converters. by an intermediate bus.

14. (Original) The computer system of claim 13 where the intermediate power bus architecture being configured to provide a redundant output voltage from the set of isolated converters to the redundant converter from the first and second group of non-isolated converters, respectively.

15. (Original) The computer system of claim 13 where the intermediate power bus architecture being configured without fault protection components.

16. (Original) The computer system of claim 13 where the set of isolated converters, the first group of non-isolated converters, and the second group of non-isolated converters include one of, AC power transformers, and DC power transformers.

17. (Original) A method of converting power, comprising:

providing a input power;

converting the input power to multiple intermediate power levels;

inputting the multiple intermediate power levels as independent input signals to a first set of power converters including a redundant input signal; and

interleaving the multiple intermediate power levels to provide independent input signals to a second set of power converters including a redundant input signal.

18. (Original) The method of claim 17, further including outputting one or more power levels from the first and second set of power converters to one or more electronic components.

19. (Original) The method of claim 18 where the outputting includes outputting the one or more power levels as one or more different voltage levels.

20. (Original) The method of claim 17 where the interleaving provides the independent input signals without including fault protection components.

21. (Original) A method of manufacturing a power conversion circuit, comprising:

positioning a plurality of power converters to convert an input voltage to a plurality of intermediate voltages;

grouping at least a first group of power converters to generate a first output voltage including at least one redundant converter, and a second group of power converters to generate a second output voltage including at least one redundant power converter;

operably connecting outputs of the plurality of power converters to inputs of the first group of power converters as independent intermediate buses without including fault protection components; and

operably connecting selected buses of the independent intermediate buses to separate inputs of the second group of power converters without including fault protection components.

22. (Original) The method as set forth in claim 21 where the operably connecting includes connecting each of the independent intermediate buses as a one-to-one relationship with each power converter in the first group of power converters, and as a one-to-one relationship with each power converter in the second group of power converters.

23. (Original) The method as set forth in claim 22 where the operably connecting forms an interleaved power bus including the independent intermediate buses.

24. (Original) A power converting system comprising:

a first power converter means for converting an input power level to an intermediate power level;

a second power converter means for converting the intermediate power level to one or more output power levels; and

a bus means for redundantly connecting the first power converter means to the second power converter means and to supply the intermediate power level as interleaved independent input signals to the second power converter means.

25. (Original) The power converting system of claim 24 where first power converter means includes a plurality of power converters being each configured to convert the input power level to the intermediate power level.

26. (Original) The power converting system of claim 24 where the bus means being configured without fault protection components.

27. (Original) The power converting system of claim 24 where the second power converter means include a plurality of power converters being selectively combined in groups where each group being configured to generate one output power level.

28. (Original) The power converting system of claim 27 where:

each group includes at least two power converters from the second power converter means; and

the first power converter means being configured to generate a plurality of intermediate power levels, where each intermediate power level provides input power to no more that one converter per group from the second power converter means.